

Notice of Allowability

Application No.

09/872,246

Applicant(s)

CHIANG, MARK

Examiner

Jay P. Patel

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 9/26/2005.
2. ☒ The allowed claim(s) is/are 2-4, 6-11 and 14-15 (claims 14 and 15 now renumbered as claims 1 and 5 respectively).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

WASHINGTON
JAN 20 2006

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
- ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
- ☒ Examiner's Amendment/Comment
- ☒ Examiner's Statement of Reasons for Allowance
- ☐ Other _____

DETAILED ACTION
EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Masako Ando on October 27th, 2005.

In claim 15, line 6, "the plurality of switches" has been amended to "a plurality of switches."

Allowable Subject Matter

2. Claims 2-4, 6-11 and 14-15 allowed.
3. Claims 14 and 15 are renumbered as claims 1 and 5 respectively.
4. The following is a statement of reasons for the indication of allowable subject matter:

In regards to claims 14 and 15, the prior art made of record either individually or in combination fails to disclose, **wherein the filter ID number is set based on at least one farthest switch in the network from each of the plurality of switches.** It is noted that the closest prior art Behzadi (U.S. Patent No. 6728220 B2), discloses a method for preventing transmission loops "between a plurality of network nodes that are connected by transmission links to form a ring, wherein each network node on the ring

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includes a right side ring port that is connected to a right side neighbor and a left side ring port that is connected to a left side neighbor,” (column 3 lines 6 through 11). In a switch for a dynamic break loop capable closed loop network, the switch comprising two uplink ports, in figure 4, Behzadi discloses a right side ring port 450 and a left side ring port 452. In figure 7, a ring with an odd number (7) of switches is disclosed (column 7 lines 56 through 67 continued on column 8 lines 1 through 57). In further regards, To prevent transmission loops in the ring topology, a number of hops that the right sided ring packet travels plus the number of hops that a left side ring packet travels must be less than or equal to $N-1$ (N minus 1 where N is the number of switches in the node). The reference further discloses that a TTL (time to live) value is determined for the right and the left side port. If the TTL value is 0 or 1 then the packet is not forwarded to then next hop. The TTL values are determined as follows:

Right TTL = Max Right Hops + 2;

Left TTL = Max Left Hops + 2;

Max Right Hops = Max Left Hops = $(N - 1)/2$; (when N is an odd positive integer);

Max Right Hops = $[(N - 1)/2] + 1$; (when N is an even positive integer);

Max Left Hops = $(N - 1)/2$; (when N is an even positive integer);

For example, in figure 7 there are 7 switches and switch 736 is designated as the transmitting switches. Applying the above formula for a ring with odd number of switches, the number of right hops will be $[(7 - 1)/2] = 3$ and the same applies for the number of left hops. Therefore on the right side, the packet will travel from node 736 to node 734 on to node 732 and stop at node 730; on the left side, the packet will travel

from node 736 to node 738 on to node 740 and stop 742. The right side packet stops at node 730 and the left side will stop at node 742. Therefore, the link 758 between nodes 742 and 730 is unused and therefore, dynamically broken. A similar procedure is described for an even number of switches in a ring (column 9 and figure 10).

In further regards, another prior art Satran et al. (6430183 B1) discloses in figure 5, a data reception procedure. The first task of the receiver is to filter the received data for desired packets by examining the source ID and the destination ID (column 6, lines 39-44).

Neither Behzadi nor Satran however, disclose the above-mentioned limitation as underlined.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jay P. Patel whose telephone number is (571) 272-3086. The examiner can normally be reached on M-F 9:00 am - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jpp 10/27/05

Jay P. Patel
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Art Unit 2666



DANIELSON
PRIMARY EXAMINER